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EXAMINER
HARRISON, CHANTE E

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2628	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>20 March 2008</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-73</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-73</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: Request for Reconsideration, filed

on 9/23/08.

2.   Claims 1-73 are pending in the case. Claims 1, 19, 23 and 26 are independent

claims.

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter.

Claim 1 is rejected under 35 U.S.C. 101 as not falling within one of the four statutory

categories of invention. Supreme Court precedent[1] and recent Federal Circuit

decisions[2] indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to

another statutory category (such as a particular apparatus), or (2) transform underlying

subject matter (such as an article or material) to a different state or thing. While the

instant claim recites a series of steps or acts to be performed, the claim neither

transforms underlying subject matter nor is positively tied to another statutory category

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[1] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v.
Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).
[2] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

that accomplishes the claimed method steps, and therefore does not qualify as a

statutory process. For example the method including steps of receiving, specifying and

detecting is of sufficient breadth that it would be reasonably interpreted as a series of

steps completely performed mentally, verbally or without a machine. The Applicant has

provided no explicit and deliberate definitions of "receiving", "specifying" or "detecting"

to limit the steps to the electronic form of the "tracking a path".

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[1] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).
[1] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims 1-10, 12-35, 37-51, 53-66 and 68-73 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Ryozo Yanagisawa et al., US 6,239,792, 2001.

Regarding claim 1, Yanagisawa discloses receiving input specifying a path including a

plurality of locations ordered along the path (col. 1, ll. 5-10, 33-36);

for each location in the plurality of locations, specifying a tracking zone based on the

location and a previous location preceding the location along the path, the tracking zone

indicating erasure of the path at the location (col. 4, ll. 18-32); and detecting motion

between a first and a second location in the path if the first location's tracking zone

overlaps with the second location's tracking zone (i.e. the coupling of erasure area

indicates erasure along a trace of input points, where erasure indicates backward

motion along the trace) (col. 4, ll. 18-32; col. 6, ll. 57-62).

Yanagisawa fails to specifically disclose indicating a direction and detecting a backward

motion.

It would have been obvious to one of ordinary skill in the art to include indicating a

direction and detecting a backward motion with the method of Yanagisawa because

Yanagisawa teaches the input indicating erasure and the pen operating like an eraser, which moves in a back and/or a forth direction to delete points.

One of ordinary skill in the art would have been motivated to include indicating a direction and detecting a backward motion with the method of Yanagisawa for the benefit of improving specification of points for deletion.

Regarding claim 2, Yanagisawa discloses wherein the path further includes a starting location, the method further comprising: specifying a tracking zone for the starting location (col. 4, ll. 18-32).

Regarding claim 3, Yanagisawa discloses evaluating the first location's tracking zone and the second location's tracking zone to verify whether the first tracking zone overlaps with the second tracking zone (col. 4, ll. 27-32).

Regarding claim 4, Yanagisawa discloses for each location in the plurality of locations, associating the location with a corresponding influence region having a predefined shape (i.e. an input point location has associated drawing image information having a shape, e.g. circle, square) (col. 6, ll. 5-25).

Regarding claim 5, Yanagisawa discloses wherein the influence region represents a paintbrush (col. 6, ll. 8-20).

Regarding claim 6, Yanagisawa discloses specifying a tracking zone for a location in the plurality of locations based on the location and a previous location in the path comprises specifying a tracking zone that is inside the influence region of the location and outside the influence region of the previous location (i.e. specifying an erasure area for one input point, where each input point has associated drawing image information having a shape, e.g. circle, square) (col. 4, ll. 20-26; col. 6, ll. 5-25).

Regarding claim 7, Yanagisawa discloses deleting a portion of the path if a backward motion is detected between the first and second locations (col. 2, ll. 38-40), the deleted portion of the path connecting the first location to the second location and including one or more locations in the plurality of locations in the path (col. 4, ll. 27-32).

Regarding claim 8, Yanagisawa discloses wherein receiving input specifying a path includes: receiving two or more input points (col. 1, ll. 5-10); and specifying the plurality of locations in the path based on the two or more input points (col. 1, ll. 5-10; col. 3, ll. 60-62).

Regarding claim 9, Yanagisawa discloses specifying the plurality of locations in the path comprises interpolating between two input points (i.e. processing drawing image information between erasure of consecutive points) (col. 6, ll. 5-20, 57-60).

Regarding claim 10, Yanagisawa discloses receiving two or more input points comprises receiving two or more input points in a two dimensional space (Fig. 1).

Regarding claim 12, Yanagisawa discloses presenting the path on a surface (Fig. 1; col. 1, ll. 5-10).

Regarding claim 13, Yanagisawa discloses the plurality of locations in the path comprises contiguous raster points (col. 4, ll. 3-10).

Regarding claim 14, Yanagisawa discloses the first location precedes the second location along the path (i.e. consecutive input points) (col. 1, ll. 5-10); and deleting a portion of the path includes deleting the first location from the path (col. 2, ll. 38-40).

Regarding claim 15, Yanagisawa discloses defining a new portion of the path, the new portion replacing the deleted portion (col. 6, ll. 5-20).

Regarding claim 16, Yanagisawa discloses specifying a tracking zone for each of the one or more new locations (i.e. a reiterative process updates the erasure area for the input points) (Fig. 5; col. 6, ll. 24-30).

Regarding claim 17, Yanagisawa discloses specifying a new tracking zone for the

second location (i.e. a reiterative process updates the erasure area for the input points)

(Fig. 5; col. 6, ll. 24-30).

Regarding claim 18, Yanagisawa discloses receiving input includes receiving user input

from a pointing device (col. 2, ll. 45-47; col. 3,ll. 60-61; Fig. 1).

Regarding independent claim 19, Yanagisawa discloses an interface (Fig. 1; col. 3, ll.

62-65) and a backward motion detector (i.e. CPU "5") (col. 3, ll. 62-67). Yanagisawa

discloses a system for implementing a method as claimed in claim 1. Therefore, the

rationale as applied in the rejection of claim 1 applies herein.

Regarding claim 20, Yanagisawa discloses the interface comprises a pointing device

(Fig. 1 "1b") to generate the input specifying the path (col. 1, ll. 5-10; col. 3, ll. 60-61).

Regarding claim 21, Yanagisawa discloses a drawing component that corrects the path

if a backward motion is detected (col. 6, ll. 5-20).

Regarding claim 22, Yanagisawa discloses a non-drawing component (i.e. erasure

mode) receiving a notification from the backward motion detector (i.e. CPU "5") if a

backward motion is detected (col. 4, ll. 15-20; col. 4-5, ll. 67-5).

Regarding claim 23, Yanagisawa discloses means (col. 3, ll. 15-50; Fig. 3) for

implementing a method as similarly claimed in claim 1. Therefore, the rationale as

applied in the rejection of claim 1 applies herein.

Regarding claim 24, the rationale as applied in the rejection of claim 7 applies herein.

Regarding claim 25, the rationale as applied in the rejection of claim 20 applies herein.

Regarding independent claim 26, Yanagisawa discloses a software product (col. 3, ll.

53-56) for implementing a method as similarly claimed in claim 1. Therefore, the

rationale as applied in the rejection of claim 1 applies herein.

Regarding claims 27-35 and 37-42, the rationale as applied in the corresponding

rejection of claims 2-10 and 12-17 apply respectively herein.

Regarding claim 43, Yanagisawa discloses receiving input includes receiving user input

from a pointing device (Fig. 1 "1b").

Regarding claim 44, Yanagisawa discloses wherein the path further includes a starting

location (col. 4, ll. 1-4), and the backward motion detector specifies a tracking zone for

the starting location (i.e. erasure mode converts input information into data identifying

points to be erased; the points to be erased have an identified erasure area, e.g. zone)
(col. 4, ll. 10-25).

Regarding claim 45, Yanagisawa discloses wherein the backward motion detector
evaluates the specified tracking zones to verify whether the two of the specified tracking
zones overlap (col. 4, ll. 21-26, 32-40).

Regarding claim 46, Yanagisawa discloses wherein each location in the plurality of
locations has a corresponding influence region having a predefined shape (col. 4, ll. 20-
26).

Regarding claim 48, Yanagisawa discloses wherein the backward motion detector
specifies, for each location in the path, a tracking zone that is inside the influence region
of the location and outside the influence region of the previous location (i.e. erasure
mode converts input information into data identifying points to be erased; each point to
be erased has an erasure area, e.g. zone, with the point located at the center of the
area/zone) (col. 4, ll. 10-25.

Regarding claim 49, Yanagisawa discloses wherein the interface receives two or more
input points, and the drawing component specifies the plurality of locations in the path
based on the two or more input points.

Regarding claim 50, Yanagisawa discloses wherein the drawing component interpolates between two input points to specify the plurality of locations in the path (i.e. input points are interconnected by a line, e.g. interpolation) (col. 4, ll. 1-6).

Regarding claim 51, Yanagisawa discloses wherein the interface receives two or more input points in a two dimensional space (col. 4, ll. 1-4; Fig. 1).

Regarding claim 53, Yanagisawa discloses wherein the drawing component presents the path on a surface (Fig. 1; Fig. 3 "3").

Regarding claim 54, Yanagisawa discloses wherein the plurality of locations in the path comprises contiguous raster points (col. 4, ll. 1-5).

Regarding claim 55, Yanagisawa discloses wherein the path includes a first location and a second location (i.e. consecutive input points) (col. 4, ll. 1-5) corresponding to the two of the specified zones (col. 4, ll. 18-20, 27-35), the first location precedes the second location along the path (col. 4, ll. 38-39), and the drawing component corrects the path by deleting two or more locations along the path, including the first location (col. 4, ll. 18-20; col. 5, ll. 1-5).

Regarding claim 56, Yanagisawa discloses wherein the path includes a first location and a second location (i.e. consecutive input points) (col. 4, ll. 1-5) corresponding to the

two of the specified zones (col. 4, ll. 18-20, 27-35). The rationale as applied in the

rejection of claims 32 and 40 apply herein.

Regarding claims 47 and 62, the rationale as applied in the rejection of claim 5 applies

herein.

Regarding claims 57-58, the rationale as applied in the corresponding rejection of

claims 41 and 42 apply herein.

Regarding claims 59-61, 63-66 and 68-70, the rationale as applied in the corresponding

rejection of claims 44-46, 48-49, 51 and 53-55 applies herein.

Regarding claims 71-73, the rationale as applied in the corresponding rejection of

claims 40-42 apply herein.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and the
> prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 11, 36, 52 and 67 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Yanagisawa as applied to claim 1 above, and further in view of Bodin

Dresevic et al., US 7,006,711, 2006.

Regarding claims 11, 36, 52 and 67, Yanagisawa discloses receiving two or more input

points comprises receiving two or more input points in a dimensional space (col. 1, ll. 5-

10; Fig. 1).

Yanagisawa fails to disclose receiving input points in a three dimensional space, which

Dresevic discloses (col. 6, ll. 61-67; col. 7, ll. 25-35).

It would have been obvious to one of ordinary skill in the art at the time of invention to

include Dresevic's receiving input points in a three dimensional space with the method

of Yanagisawa because Dresevic teaches all ink/strokes relate to a framework that

includes two and three dimensional space.

One of ordinary skill in the art would have been motivated to include Dresevic's

receiving input points in a three dimensional space with the method of Yanagisawa for

the benefit of processing any strokes of a trace that are defined spatially.

Response to Arguments

Applicant's arguments filed 9/23/08 have been fully considered but they are not

persuasive.

Applicant argues Yanagisawa et al. do not teach "detecting a backward motion between

a first and a second location in the path if the first location's tracking zone overlaps with

the second location's tracking zone."

In response, Yanagisawa teaches user input of a trace of consecutive input points using

a pen (col. 4, ll. 3-7). The trace of consecutive points corresponds to a path.

Yanagisawa teaches a CPU for receiving input commands, such as an erasure mode

(col. 3, ll. 63-67). The erasure mode of Yanagisawa sets an erasure area (col. 4, ll. 14-

16) along the trace by coupling erasure areas corresponding to consecutive input points

(col. 4, ll. 18-20). The size of the erasure area is changed based on the motion speed

and motion distance obtained from the coordinate data of input points (col. 4, ll. 33-40)

as the pen operates like an eraser (col. 4, ll. 17-18). Thus, during erasure mode the

motion of the pen over consecutive input points, which were previously input to define a

trace, is tracked to identify areas surrounding the consecutive input points. The

identified areas are erased from the screen (col. 5, ll. 2-5). Hence, movement of the

pen, which is like an eraser during erasure mode, from one input point to an input point

one sampling point before (col. 4, ll. 35-40) suggests a backward motion along the

original trace as erasing occurs due to a back and/or forth motion. Therefore,

Yanagisawa et al. teach "detecting a backward motion between a first and a second location in the path if the first location's tracking zone overlaps with the second location's tracking zone."

Applicant argues Yanagisawa fails to disclose "a tracking zone that is inside the influence region of the location and outside the influence region of the previous location."

In response, the prior art teaches the pen is used to change the image processing area (summary) and operates like an eraser (col. 4, ll. 15-20); when in erase mode the erasure corresponds to the input point (step 4) and the size of the erasure area changes based on the pen's speed and motion distance between a current sampling point and a previous sampling point; erasure occurs between a current point and a next point (step 5).

Yanagisawa teaches the pen motion characteristics affect the size of the erasure area, such that the user can select a small erasure area to erase fine and narrow information by moving the pen slowly. When erasing fine and narrow information, such as a single point, the erasure area only affect the single point and is within the influence region, the erasure area affecting that point, and outside the influence region of another point. Therefore, Yanagisawa discloses "a tracking zone that is inside the influence region of the location and outside the influence region of the previous location."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHANTE HARRISON whose telephone number is (571)272-7659. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chante Harrison/

Primary Examiner, Art Unit 2628